REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed July 24, 2008. Claims 1-23 were pending in the present application. This Amendment amends claims 1, 8, and 14, leaving pending in the application claims 1-23. Applicants submit that no new matter has been introduced by virtue of these amendments. Reconsideration of the rejected claims is respectfully requested.

Examiner Interview

Applicants would like to thank Examiner Yang and Examiner Chauhan for the interview regarding this application conducted on October 22, 2008. Applicants' independent claim 1 was discussed in light of Smirnov et al. (U.S. Patent No. 6,570,578, hereinafter "Smirnov") and Oka (U.S. Patent No. 7,102,639, hereinafter "Oka"). In particular, distinctions between claim 1 and the Smirnov and Oka references, as well as possible clarifying amendments, were discussed.

Although no particular agreement was reached, the Examiners indicated that they would take our arguments into consideration. The following remarks reflect the substance of the discussion.

35 U.S.C. §101 Rejection of Claim 14

Claim 14 is rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. In particular, the Office action asserts "claim 14 is directed towards a computer program not embodied on a computer readable medium because the claim does not require the program product to be included in the program memory. Computer programs per se are non-statutory." (Office Action: pg. 2).

Although Applicants do not necessarily agree with the rejection, solely in order to expedite prosecution the preamble of claim 14 has been amended to recite "wherein the computer program product resides on a tangible medium." Examples of such tangible media,

such as RAM and disk drives, are described in the Specification at, *e.g.*, paragraphs 17 and 30. Accordingly, the Section 101 rejection of claim 14 is believed to be overcome.

35 U.S.C. §103(a) Rejection of Claims 1-23

Claims 1-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Smirnov in view of Oka. Applicants respectfully traverse the rejection.

Applicants' independent claim 1 is directed to a method for rendering a frame of animation using scene descriptor data that includes multiple specifications for a single object. In various embodiments, the multiple specifications are completely unrelated to each other (*i.e.*, derived separately). For example, scene descriptor data for a particular frame of animation may include a first specification for a "snowman" character rig that comprises a set of sphere primitives. The scene descriptor data may also include a second specification for the "snowman" character rig that comprises a completely different (and unrelated) set of components, such as NURB surfaces. At the time of rendering, a user (*e.g.*, an animator) selects a rendering option corresponding to one of the multiple specifications. This selection causes the appropriate specification to be loaded into memory and rendered.

In accordance with the above, independent claim 1 recites:

> A method for rendering a frame of animation in a computer system having a computer memory, the method comprising:
>
> retrieving scene descriptor data associated with the frame of animation, wherein the scene descriptor data includes a first specification of at least one object, the first specification being associated with a first user-defined purpose for rendering the frame of animation, wherein the scene descriptor data includes a second specification of the at least one object, the second specification being associated with a second user-defined purpose for rendering the frame of animation, and wherein the first and second specifications are separately derived;
>
> receiving a selection of a first rendering option corresponding to the first user-defined purpose or a second rendering option corresponding to the second user-defined purpose;
>
> querying a database external to the computer system for a first representation of the one object in response to the first specification of the object when the selection is of the first rendering option;

receiving the first representation of the object from the database external to the computer system when the selection is of the first rendering option;

loading the first representation of the object into the computer memory when the selection is of the first rendering option; and

rendering the object for the frame of animation using the first representation of the object when the selection is of the first rendering option;

wherein the first representation of the object is not loaded into the computer memory when the selection is of the second rendering option.

(Applicants' independent claim 1, emphasis added).

Applicants respectfully submit that the features of independent claim 1 are not taught or suggested by Smirnov or Oka, considered individually or in combination. For example, Smirnov and Oka fail to teach or suggest "retrieving scene descriptor data associated with the frame of animation, wherein the scene descriptor data includes a first specification of at least one object,... wherein the scene descriptor data includes a second specification of the at least one object,... and wherein the first and second specifications are separately derived" as recited in claim 1. (Emphasis added).

The Office Action does not identify a section of Oka that teaches the above feature of claim 1. However, the Office Action asserts that this feature is taught by Smirnov. (Office Action: pg. 3). Applicants respectfully disagree.

Smirnov is directed to a method for rendering pass-images (or "passes") from data defining a three-dimensional scene. (Smirnov: Abstract). These passes show particular features of the final rendered image for the scene. For example, a "matte pass" is an image that only shows the outline of a selected object, without any background or other objects. Similarly, a "shadow pass" is an image that only shows the shadow of a selected object. (Smirnov: col. 2, lines 20-27). As described in Smirnov, each pass is generated by first creating a "pass definition." The pass definition essentially acts as a filter for determining which portions of the scene data will be rendered. (Smirnov: col. 9, lines 36-50). Once the pass definition has been created, the scene data is filtered through the pass definition, thereby generating a rendered pass. (Smirnov: col. 11, lines 10-12).

Applicants submit that Smirnov fails to teach anything about "scene descriptor data includ[ing] a first specification of at least one object" and "scene descriptor data includ[ing] a second specification of the at least one object," "wherein the first and second specifications are separately derived" as recited in Applicants' claim 1. As best understood, the Examiner construes the pass definitions of Smirnov as corresponding to the recited first and second specifications of claim 1. However, as described above, the pass definitions of Smirnov are merely filters that are used to filter the data for a scene. For example, Smirnov states: "this is accomplished by filtering the relevant scene data through the pass definition..." (Smirnov: col. 11, lines 10-12; emphasis added). Since a pass definition is used to filter scene data, the pass definition cannot be included in the scene data itself. In contrast, claim 1 specifically recites that the first and second specifications are included in the scene descriptor data for a scene. Accordingly, the pass definitions of Smirnov cannot be properly construed as corresponding to the first and second specifications recited in claim 1.

At the Examiner interview, the Examiner asserted that the phrase "scene descriptor data" is vague, and thus could be construed as encompassing the pass definitions described in Smirnov. Applicants respectfully disagree. As recited in the Specification, scene descriptor data refers to data (such as a text file) that specifies objects within a scene. (Specification: para. 35). For example, the scene descriptor data for a scene may identify what objects are included, how are they positioned, *etc*. In contrast, the pass definitions of Smirnov do not specify the objects within a scene. In fact, Smirnov specifically states "the pass definitions are not used to add objects to the scene." (Smirnov: col. 10, lines 15-16; emphasis added). Rather these pass definitions merely contain parameters that are used to filter or modify objects that are specified elsewhere (*e.g.*, in separate scene data). At best, the recited scene descriptor data of claim 1 corresponds to the scene data described in Smirnov, which (as discussed above) is necessarily separate from any pass definitions. Accordingly, the pass definitions of Smirnov cannot be properly construed as being included in the scene descriptor data of claim 1.

The deficiencies of Smirnov in this regard are not remedied by Oka. Oka is directed to a method for rendering an object image at varying levels of detail based on an attribute of the object image. (Oka: col. 2, lines 10-21). For example, the object image of Oka

may be rendered using a first, high level of detail (LOD) representation or a second, low LOD representation. (*See* Oka: Fig. 9). Significantly, the first and second representations for the object image are dependent on each other; specifically, the second representation is derived by simplifying the first. (Oka: col. 3, lines 1-15: "The image processing apparatus further comprises a simplifying device that simplifies the first data to generate the second data…"). Accordingly, Oka also fails to teach or suggest "retrieving scene descriptor data associated with the frame of animation, wherein the scene descriptor data includes a first specification of at least one object,… wherein the scene descriptor data includes a second specification of the at least one object,… and wherein the first and second specifications are separately derived" as recited in claim 1. (Emphasis added).

Further, since Smirnov and Oka fail to teach or suggest the recited first and second specifications of claim 1, Smirnov and Oka necessarily fail to teach or suggest the remaining features of claim 1, such as "querying a database… for a first representation of the one object in response to the first specification…," "receiving the first representation…," and "loading the first representation…"

In view of the above, even if Smirnov and Oka were combined (although there appears to be no rationale for combining), the resultant combination would not teach or suggest all of the features of Applicants' independent claim 1. Accordingly, Applicants submit that claim 1 is allowable over Smirnov and Oka, and respectfully request that the rejection of claim 1 be withdrawn.

Independent claims 8 and 14 recite features that are substantially similar to independent claim 1, and are thus believed to be allowable for at least a similar rationale as discussed for claim 1, and others.

Dependent claims 2-7, 9-13, and 15-23 depend (either directly or indirectly) from independent claims 1, 8, and 14 respectively, and are thus believed to be allowable for at least a similar rationale as discussed for claims 1, 8, and 14, and others.

Amendments to the Claims

Unless otherwise specified, amendments to the claims are made for purposes of clarity, and are not intended to alter the scope of the claims or limit any equivalents thereof. The amendments are supported by the Specification as filed and do not add new matter.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

/Andrew J. Lee/

Andrew J. Lee
Reg. No. 60,371

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
A2L:m4g
61454061 v1